

ABSTRACT OF THE DISCLOSURE

In formation-by-growth of an AlGa_N layer 3 as having a double-layered structure, a non-doped AlGa_N layer (i-AlGa_N layer) having an Al compositional ratio of approximately 15% is formed to a thickness of approximately 3 nm on an i-GaN layer, and further thereon, an AlGa_N layer (n-AlGa_N layer) doped with Si in a concentration of approximately $2 \times 10^{18}/\text{cm}^3$ and having an Al compositional ratio of approximately 15% is formed to a thickness of approximately 17 nm.